

Timber will be removed from riparian management zones when adequate protection can be provided for key nontimber resources and habitats. The department, relying on various resource specialists, will have the latitude to modify means of logging and conducting other activities within these zones to ensure that key nontimber resources and habitats are adequately protected.

Alternative 1 allows all but serious damage to occur to Type 1-3 waters, and only requires "as needed" protection for Type 4 waters. Type 5 waters are not protected. The alternative allows for the possibility of the greatest environmental degradation.

Alternative 2 protects all Type 1 through 5 waters. It addresses effects on water quality and quantity, fish and wildlife habitat, aesthetics, and sensitive plant species and native wetland vegetation. Because of the difficulty of carrying out logging operations around Type 5 tributary headwaters, this alternative is the least desirable from an operational standpoint, though it affords the greatest environmental protection.

Alternative 3, the no-policy option, would require the department to follow state Forest Practices Act regulations but would not require the department to take the initiative and consider items or issues not specifically addressed by the Act.

Policy No. 21: Wetlands

The preferred policy states:

The department will allow no overall net loss of naturally-occurring wetland acreage and function. (current policy)

Three alternatives were considered by the department:

Alternative 1: The department will allow no loss of naturally-occurring wetland acreage and function.

Alternative 2: The department will allow no significant loss of wetland acreage and no significant adverse impacts to wetland function.

Alternative 3, the no-policy option, would allow the department to develop a wetland policy on an ad hoc basis, complying only with the minimum legal requirements and guidelines but not offering any additional wetlands protection.

Background

Wetlands are transitional areas between water and land, where the water table is at or near the surface of the soil long enough during the growing season to influence the types of plants that grow in that environment. Wetlands have many functions and values, including flood water storage, water filtration and purification, plant diversity and fish and wildlife habitat. (The department adopts the U.S. Fish and Wildlife Service definition of wetlands. See glossary.)

The amount of wetlands on state forest lands is comparatively small, and the department's impact on wetlands has traditionally not been significant because it does not fill or dredge for materials. Current estimates show that wetlands constitute only two-tenths of one percent in the Southeast Region and five percent in the Olympic region. (The amount of wetlands addressed by this plan probably ranges from 1 to 3 percent of the total state forest land in Western Washington, equivalent to approximately 13,000-39,000 acres. This figure is based on 1.3 million acres of on-base forest lands in Western Washington, as opposed to 2.1 million acres of state forest land in the entire state.) The department has not made an estimate of the percent of wetlands on state forest lands in Eastern Washington, but it is expected to be less than Western Washington.

The department is committed to protect these areas, and it has adopted a policy of "no overall net loss of wetlands on state lands." Timber harvesting in wetlands is not prohibited under the department's preferred policy, though it would be minimized to the extent necessary to avoid overall net loss of wetland acreage and function.

The word "function" in the policy refers to a range of activities and characteristics, including the hydrologic function of a particular wetland. For example, if a wetland has been impacted by road construction or logging so that it no longer holds water, or it no longer collects and releases water the same way it did before, then its function has been impaired. The same principle applies to a forested wetland which, if harvested, would no longer support trees. In those situations, the wetlands function has changed, and the preferred policy described above would apply by requiring the department to restore the wetlands or acquire a sufficient amount of new wetlands to avoid an overall, net loss of naturally-occurring wetlands on state forest lands.

Comparison of Alternatives and Environmental Impacts

Under the **preferred policy**, timber management activities will be allowed in and around wetlands only when the level of protection contemplated in the department's preferred policy can be met.

Road construction is the most common activity conducted by the department which affects wetlands. The department intends to restrict these situations to the minimum level and to protect wetland areas where possible. In the rare instance where a road or other activity adversely impacts a wetland, the department is committed to restore the land or acquire new wetlands elsewhere so that the net, overall amount of wetlands and function is not decreased.

Special attention will be given to wetlands that contain endangered or threatened species. In those locales, no activity will be allowed.

This policy is analogous to the department's proposed policy on riparian management zones which states that timber will be removed only when adequate protection can be provided to key nontimber resources and habitats. The preferred policy requires the department to offset any loss of wetlands acreage and function by either restoring the area in question (for example, removing a logging road) or by purchasing additional wetlands to substitute for the wetlands that has been damaged. Because either of these choices is expensive and potentially difficult to accomplish, the net effect of the policy is to discourage any department activity that reduces the amount and function of wetlands.

In Alternative 1, the department would protect all wetlands from entry, with no exceptions. This is the least-flexible of the options; it requires the department to adopt a "no entry" policy regardless of site characteristics and the possibility that the acreage and function will be restored.

In Alternative 2, the department would allow non-significant losses of wetlands, a decision which would be left initially to the regional offices to interpret. The department would have the flexibility to interpret this policy and change the amount of protection without formal, written standards. The effect would likely be to allow more activities on wetlands than under the preferred policy.

In Alternative 3, the no-policy option, the department would meet current legal requirements but would not do more than necessary to comply with existing, federal and state statutes and regulations. Few statutes restrict the department in this area, and the no-policy option therefore allows the department to proceed with few restraints, though it could voluntarily impose conditions on its own activities in a particular case.

4.5 DISCUSSION OF WILDLIFE POLICY ALTERNATIVES

Policy No. 22: Wildlife Habitat

The preferred policy states:

The department will provide habitat for wildlife habitat conditions which have the capacity to sustain native wildlife species or communities. The department will develop wildlife habitat objectives based upon habitat availability and function, species status and species vulnerability, and trust obligations. When there are apparent conflicts between meeting wildlife habitat and trust management objectives, the department will seek balanced solutions and policies.

Two alternatives were considered by the department.

Alternative 1: The department, consistent with trust obligations, will retain wildlife habitat capability that has a probability of maintaining viable wildlife populations if sufficient quantity and quality of habitat exists on state forest land to support these populations. Only those individual species protected by existing law will be affected by this alternative.

Alternative 2: The no-policy option would allow the department to meet regulatory requirements concerning wildlife but it would not do more to protect wildlife habitat.

Background

Although there are existing statutes that protect endangered and threatened species, there is no current policy that directs the department to manage wildlife habitat.

The department currently responds to individual wildlife protection issues as they come up in the context of the Forest Practices Act. Because activities on state forest land can reduce habitat capability and can seriously damage wildlife populations and communities, the department decided to develop a statewide policy that would better protect wildlife and would offer guidance to the administrative regions.

Comparison of Alternatives and Environmental Impacts

The **preferred policy** requires the department to provide a higher degree of certainty that viable wildlife populations will be sustained on state forest lands. It sets forth criteria which guide department decisions in evaluating when to protect wildlife habitat. The policy, together with other Forest Resource Plan objectives, will enable the department to plan and manage for most, if not all, of the important wildlife species on state forest land. The policy, which is procedural, has no significant adverse environmental impacts. It will help sustain more species and communities in the 1990s.

Alternative 1, in contrast, results in a lower degree of protection for fewer wildlife species. The alternative directs the department to develop specific objectives only for individual species which are protected under existing legal requirements, and it requires that habitat capability be maintained at the minimum level required by law. It does not provide for improving habitat capability, nor does it address wildlife communities (a group of species that interact with each other, as opposed to populations which are measured only by numbers of animals).

Alternative 2, the no-policy option, does not require the department to formulate a strategy for dealing with wildlife issues on state forest land. By directing conformance with legal requirements only, and not addressing potential habitat quality improvement, the department remains reactive, waiting until legal requirements change before initiating new habitat management methods. The department does not believe this alternative is consistent with its duties as a prudent land manager.

4.6 DISCUSSION OF ENDANGERED, THREATENED AND SENSITIVE SPECIES POLICY ALTERNATIVES

Policy No. 23: Endangered Species

The preferred policy states:

The department will meet the requirements of federal and state laws and other legal requirements that protect endangered, threatened and sensitive species and their habitats. The department will actively participate in efforts to recover and restore endangered and threatened species to the extent that such participation is consistent with trust obligations.

Two alternatives were considered by the department.

Alternative 1: The department will avoid impacts on plant and animal species considered endangered. Consistent with trust management obligations, the department will avoid impacts on species considered threatened, and consider avoiding or lessening impacts on species considered sensitive. (current policy)

Alternative 2, the no-policy option, would allow the department to meet the minimum legal requirements of federal and state statutes, but the department would not do more to protect endangered, threatened and sensitive species and their habitats.

Background

Endangered, threatened, and sensitive species are, by definition, those species most in need of special management attention. Because of their precarious status they are among the species of greatest interest to the public. Various laws and regulations at the federal and state level protect these species and their habitats. For those reasons, it is important for the department to have a policy that specifically addresses these species.

This policy addresses wildlife, fish, invertebrates and plants. (Although endangered, threatened and sensitive wildlife species are specifically addressed here, they are also addressed in the wildlife policy.)

There are no endangered or threatened flora (plants and trees) found on state forest land, though a list of potential candidate plants (sensitive plants) has been identified by the department's Natural Heritage Program.

The federal and state government have listed several species of fauna (animals) as endangered or threatened. **Table 21** contains the federal list of endangered and threatened species found on forested land in Washington State. The complete federal listing of endangered and threatened species is contained in the Federal Register dated July 15, 1991 (50 CFR 17.11 and 17.12). The complete state listing is contained in the Washington Administrative Code (WAC 232-12-014).

Comparison of Alternatives and Environmental Impacts

The **preferred policy** directs the department to comply with all laws and other legal requirements that protect endangered, threatened and sensitive species and their habitats. In addition, it requires the department to participate in efforts to recover and restore certain species -- an activity that is currently not in federal or state law.

TABLE 21
Federal List of Endangered and Threatened Species of Fauna
Found on Forest Land in Washington State

Endangered Species:

1. Brown pelican (*Pelecanus occidentalis*)
2. Columbian white-tailed deer (*Odocoileus virginianus leucurus*)
3. Woodland caribou (*Rangifer tarandus*)
4. Peregrine falcon (*Falco peregrinus*)
5. Gray wolf (*Canis lupus*)

Threatened Species:

1. Aleutian Canada goose (*Branta canadensis leucopareia*)
2. Oregon silverspot butterfly (*Speyeria zerene hippolyta*)
3. Bald eagle (*Haliaeetus leucocephalus*)
4. Grizzly bear (*Bear ursus arctos*)
5. Northern Spotted Owl (*Strix occidentalis*)

Proposed:

Critical habitat for the Northern Spotted Owl
Marbled murrelet (*Brachyramphus marmoratus*)

The **preferred policy** will allow the department to try to avoid future listings of endangered or threatened species. The preferred policy, in conjunction with the Aquatic Systems and Wildlife Policies (No. 19-22) will allow the department to better manage state forest lands for a range of nontimber resources.

The preferred policy will allow the department to provide additional protection in certain circumstances to endangered, threatened and sensitive species by allowing it to participate in recovery and restoration efforts, if compatible with overall trust obligations.

Alternative 1, current policy, is more ambiguous and only directs the department to "avoid impacts," a weaker policy. It does not require the department to participate in any recovery or restoration efforts.

Alternative 2, the no-policy option, would require the least of the department and would put it in a less active position. Under this alternative, the department would respond to situations that threatened a particular species. It would do little to prevent listings in the first place or to participate in efforts to restore and recover endangered, threatened or sensitive species.

4.7 DISCUSSION OF HISTORIC AND ARCHAEOLOGICAL SITES POLICY ALTERNATIVES

Policy No. 24: Identifying Historic Sites

The preferred policy states:

The department will establish a program to identify and inventory historic and archaeological sites and protect them at a level which, at a minimum, meets regulatory requirements.

Two alternatives were considered by the department.

Alternative 1: The department will manage forest land in ways that identify and protect cultural resources. (current policy)

Alternative 2, the no-policy option, would require the department to manage state forest lands to protect known cultural sites and areas in compliance with state and federal laws. The department would only meet these minimum legal requirements. It would not make an independent effort to identify sites and would rely instead on available public information and the activities of other agencies.

Background

Various federal and state laws protect historic and archaeological places. The state Office of Archaeology and Historic Preservation (OAHP) maintains a register of historic and archaeological sites. In addition, the department maintains a computerized "flagging" system used by land managers in evaluating specific project impacts. Sites registered with the state are identified quickly using this system. The department recognizes that Native American graves and archaeological sites are protected from disturbance by specific state statutes (RCW 27.44 and 27.53).

Comparison of Alternatives and Environmental Impacts

The **preferred** policy differs from current policy because it creates a program to identify and inventory historic and archaeological sites. The state OAHP currently has limited funding to conduct inventories for historic and archaeological places in Washington. The program developed under the department's preferred policy would select the types of resources to be inventoried on department-managed lands and it would begin efforts to identify these resources in advance of land management activities. Under this policy, the department would seek to secure greater protection for these features than is currently required by state and federal laws.

This policy is primarily procedural and will have no significant adverse environmental impacts. It requires the department to evaluate the impact of its activities on historical and archaeological sites. The preferred policy requires the department to answer environmental questions before specific activities are undertaken, thus preventing destruction or damage to historical and archaeological resources.

Alternative 1 would require the department to identify and protect historical and archaeological resources only as relevant information becomes available. This alternative provides less protection than the preferred policy because the department would establish a program to inventory historical and archaeological sites just before management activities began. The department would rely on other state agencies but would not establish a program of its own. It would place historical and archaeological sites at greater environmental risk than the preferred policy.

Alternative 2, the no-policy option, would allow the department to protect only known sites but would not require it to identify additional sites. This alternative involves the least amount of protection for historic sites.

4.8 DISCUSSION OF PUBLIC ACCESS AND RIGHTS OF WAY POLICY ALTERNATIVES

Policy No. 25: Providing Public Access

The preferred policy states:

The department will provide public access for multiple uses on state forest lands. In certain circumstances the department will control vehicular and other access, but only where necessary to accomplish specific management objectives. Public access may be closed, restricted or limited to protect public safety; to prevent theft, vandalism and garbage dumping; to protect soils, water quality, plants and animals; or to meet other objectives identified in the plan. (current policy)

Three other alternatives were considered by the department.

Alternative 1: The department will close roads not serving developed recreation sites and not needed for management purposes.

Alternative 2: The department will allow public access on all existing and new roads.

Alternative 3, the no-policy option, would allow each administrative region to decide whether or not to allow public access.

Background

Although the department traditionally opens its land to public access, it has been forced to consider closing roads and restricting access to curb vandalism and litter. Illegal garbage dumping in some areas is a serious problem and getting worse. In 1989, the department identified approximately 1,600 dump sites on state forest lands, many still in existence and increasing in size. The majority are in Western Washington. The waste stream typically is composed of 80 percent household waste and 20 percent commercial waste.

In addition, illegal hazardous waste dumping is an ongoing problem. Approximately one-fourth of the illegal disposal sites occur in or within 100 feet of surface water. Because of the threat of water pollution, these sites receive priority for cleanup. In the Yacolt Burn State Forest in Clark and Skamania Counties, for example, the department removed 20 cars and more than 400 tires and 80 cubic yards of garbage in a six-month period.